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## INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification <sup>6</sup> : <b>A61L 27/00, A61K 35/38</b>		A3	(11) International Publication Number: <b>WO 98/22158</b>
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<p>(21) International Application Number: PCT/US97/14855</p> <p>(22) International Filing Date: 22 August 1997 (22.08.97)</p> <p>(30) Priority Data: 60/024,542 23 August 1996 (23.08.96) US 60/024,693 6 September 1996 (06.09.96) US</p> <p>(71) Applicants: COOK BIOTECH, INCORPORATED [US/US]; 3055 Kent Avenue, P.O. Box 2603, West Lafayette, IN 47906 (US). MED INSTITUTE, INCORPORATED [US/US]; 1400 Cumberland Avenue, West Lafayette, IN 47906 (US).</p> <p>(72) Inventors: COOK, William, A.; 1208 Wylie Street, Bloomington, IN 47401 (US). HILES, Michael, C.; 4326 South 900 East, Lafayette, IN 47905 (US). KOZMA, Thomas, G.; Apartment 2C, 3118 Courthouse Drive, West Lafayette, IN 47906 (US). PATEL, Umesh, H.; 1135 Kingswood Road South, West Lafayette, IN 47906 (US).</p> <p>(74) Agent: GODLEWSKI, Richard, J.; P.O. Box 2256, West Lafayette, IN 47906 (US).</p>	<p>(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, ARIPO patent (GH, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG).</p> <p>Published <i>With international search report.</i></p> <p>(88) Date of publication of the international search report: 22 October 1998 (22.10.98)</p>
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(54) Title: GRAFT PROSTHESIS, MATERIALS AND METHODS

(57) Abstract

A graft prosthesis (11), materials and method for implanting, transplanting, replacing, or repairing a part of a patient. The graft prosthesis includes a purified, collagen-based matrix structure removed from a submucosa tissue source. The submucosa tissue source is purified by disinfection and removal steps to deactivate and remove contaminants, thereby making the purified structure biocompatible and suitable for grafting on and/or in a patient.

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# INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 97/14855

**A. CLASSIFICATION OF SUBJECT MATTER**  
IPC 6 A61L27/00 A61K35/38

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)

IPC 6 A61L A61K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 480 424 A (COX JAMES L) 2 January 1996  see the whole document ---	1,20, 27-40, 44-54, 62-64
X	WO 96 25179 A (BONADIO JEFFREY ;PURDUE RESEARCH FOUNDATION (US)) 22 August 1996 cited in the application  see claims ---	1,20, 27-40, 44-54, 62-64
X	US 5 275 826 A (BADYLAK STEPHEN F ET AL) 4 January 1994 cited in the application  see claims; examples ---	1,20, 27-40, 44-54, 62-64

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# INTERNATIONAL SEARCH REPORT

Int. l. Application No

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>WO 93 05798 A (PURDUE RESEARCH FOUNDATION) 1 April 1993</p> <p>see claims &amp; US 5 372 821 A cited in the application</p>	<p>1,20, 27-40, 44-54, 62-64</p>
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X	<p>S.F.BADYLA ET AL.: "THE USE OF XENOGENIC SMALL INTESTINAL SUBMUCOSA AS A BIOMATERIAL FOR ACHILLE'S TENDON REPAIR IN A DOG MODEL" JOURNAL OF BIOMEDICAL MATERIALS RESEARCH, vol. 29, no. 8, 1995, pages 977-985, XP002071882 see abstract</p>	<p>1,20</p>
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